NOVEL MULTIFUNCTIONAL ADHESIN PROTEINS AND THEIR DISPLAY IN MICROBIAL CELLS

ABSTRACT

Recombinant cells expressing a multifunctional adhesin protein derived from a naturally occurring adhesin, containing a binding domain that is capable of binding to an organic receptor and a binding domain that is capable of binding to a compound to which the naturally occurring adhesin protein substantially does not bind. The cells or modified adhesin proteins, optionally in immobilized form, are useful for separating organic and inorganic compounds including toxic or precious metals from an environment.